

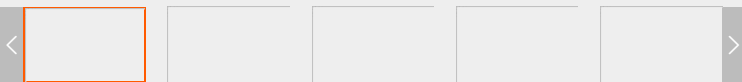
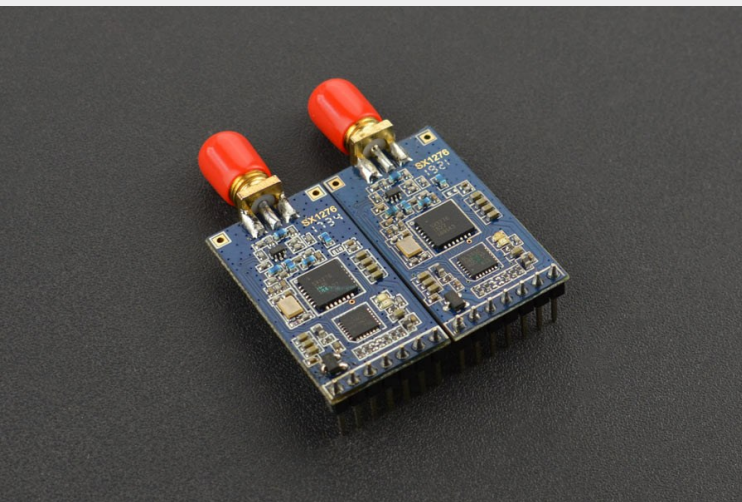


Register to Get  Shipping Coupon

 0

 LOGIN/SIGN UP

HOMECOMMUNITY **NEW**FORUMWIKIBLOGPRODUCT LINES EDUCATION\$USDWISH LIST

[Modules](#) / [Communications](#) / [Radio \(RF\)](#) / [LoRa MESH Radio Module - 868MHz](#)

LoRa MESH Radio Module - 868MHz

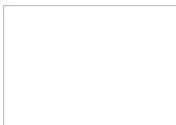
SKU:TEL0117 Brand:Other Reward Points: 399

* Model: Quantity:

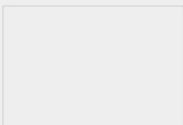
ADD TO CART



Frequently Bought Together



+



Gravity: IO Exp... V7.1



You have chosen:0
Total amount:

BUY IT NOW

INTRODUCTION

LoRa MESH Radio Module is a high performance, low power, long-range micro-power RF module, using a distributed ad-hoc network communication mode, embedded wireless MESH MANET protocols, users do not need to do anything modified to present devices, protocols, nor need for secondary development to module, but can easily implement wireless ad-hoc networks. RF chip module technology based on spread spectrum frequency hopping, spread spectrum calculations and leading internal automatic CRC error correction processing. The stability, anti-interference ability and receive sensitivity are better than other types of modules. Module also supports API mode, transparent mode and AT command mode, the user can configure our PC software, or send AT commands through the microcontroller, based on the parameters of the actual demand for flexible configuration of the module, simple operation, easy to use, strong adaptation.

Recommend [USB to TTL Converter](#) to set the module parameter, and [Gravity IO Expansion Shield](#) can directly work with the Lora modules.

FEATURES

- Frequency Range: 868/915 MHz (Sx1276)
- Based LoRa modulation techniques.
- Half-duplex communications, serial data transparent transmission.
- Embedded MESH distributed MANET protocols.
- Each communication has multiple handshake confirmation, to ensure the stability of the data.
- Voltage: 3.3-5.0V
- Micro-power transmission, standard 100mW, 7-Level adjustable.
- Receive sensitivity up to -148dBm, the maximum transmit power + 20dBm.
- High-efficiency forward error correction coding techniques and frequency hopping mechanism, anti-interference ability, low error rate.

- Support Serial wake, ready to send and receive data, no periodic wake-up time.
- Support Air wake AUX signal given by the module, Wake user device.
- CAD detection LoRa signal, to prevent accidental wake.
- Communication protocol conversion and RF transceiver to switch automatically, without user intervention, simple to use.
- Can be flexibly set the module parameters via software or microcontroller commands.
- 2.54 standard pin interface, easy embedded installation, TTL level signals.
- Built-in watchdog to ensure long-term reliable and stable operation.
- Open ground between nodes effective communication distance up to 1.5-2.5 km.

SPECIFICATION

- Operating Voltage: 3.3 - 5.0V
- Operating Frequency Band: 868MHz
- Output Power: ≤ 20dBm
- Receiving Sensitivity: -148dBm
- Emission Current: ≤100mA
- Standby Current: ≤ 20mA
- Communication Interface: TTL serial communication
- Serial Speed: 1200 ~ 115200, 9600bps (default)
- Operating Temperature: -40 ° C - + 85 ° C
- Dimension: 34.2 * 18.4 mm

DOCUMENTS

- [Datasheet](#)

SHIPPING LIST

- LoRa MESH Radio Module - 868MHz x2
- 868MHz antenna (2m SMA-Male connector) x2

REVIEW

FAQ

25 Comments

DFRobot

Disqus' Privacy Policy

1 Login

Recommend

Tweet

Share

Sort by Best

n the discussion...

Ivan Arakistain • 3 months ago

Are problems with datasheet solved? What module would you recommend me for LoRaMESH?

^

•

Reply

•

Share

>

↓

DFRobot Support Mod → Ivan Arakistain • 3 months ago

Hi Ivan,
We think there is no problem with the datasheet, so there is no change. There are two types of LoRaMESH modules, 868GHZ and 433MZH, the specifications are the same, but the working frequency bands are different, you can choose according to your needs

^

•

Reply

•

Share

>

↓

bitswap • a year ago

What is the maximum number of nodes that can be part of one mesh network?

^

•

Reply

•

Share

>

↓

R Back • a year ago

I am looking through the datasheet and the AT commands seem to be almost complete but there dose not seem to be an example command to change the radio power level, can this be changed through the AT command interface? Also there are no examples of

Downloaded from [Arrow.com](#) to the English versions of the radio utilities shown in the datasheet?

^ · Reply · Share >
↓



DFRobot Support Mod → R Back · a year ago

Unfortunately that is the only supporting document we have in English. When you refer to radio power level, are you trying to change the frequency of the module?

^ · Reply · Share >
↓



R Back → DFRobot Support · a year ago

Please reference page 8 of the datasheet: one of the setup parameters is the transmit power level of the radio, there are 8 levels from 5 dBm to 20 dBm. Is there an equivalent AT command to set this parameter, it is not documented in the datasheet?

^ · Reply · Share >
↓

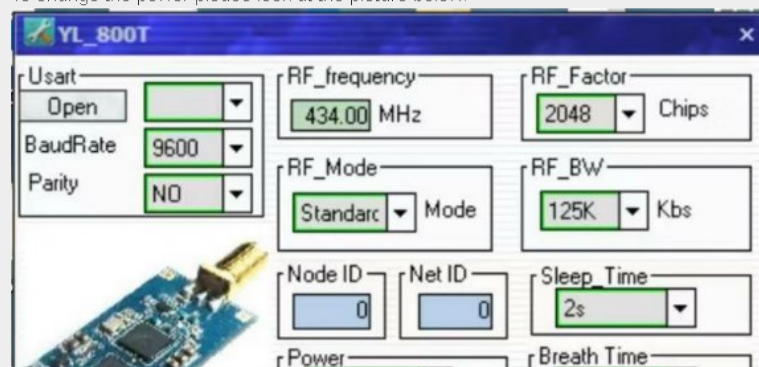


DFRobot Support Mod → R Back · a year ago

We were unable to find any AT command for this function, however

you can use a wireless module configurator tool to configure the transmission power. You can download from this link, <http://www.rf-module.cn/dow...>

To change the power please look at the picture below:



see more

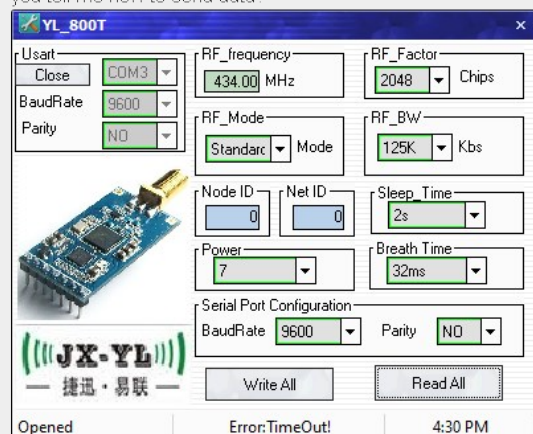
^ · Reply · Share >
↓



Van Dai → DFRobot Support · a year ago

Hi, I tried to read the parameters of node, but the answer was timeout.

Btw, I also tried to send data between 2 nodes by writing text in terminal (Terminate), but it didn't work. Could you tell me how to send data?



^ · Reply · Share >
↓



Sepp W · a year ago

Would it be possible to send MavLink over the LoRa MESH Radio to several clients?

^ · Reply · Share >
↓



DFRobot Support Mod → Sepp W · a year ago

The LoRa module is purposed as a communication device rather than a protocol, so you can send data reliably between devices. The data you send can you be interpreted by the connected device however you would like to handle. Although I am unfamiliar with MavLink, if you are sending data between devices this should suffice.

^ · Reply · Share >
↓

Hans Skaade • 2 years ago
is the interface easy enough to change the frequency and baudrate?

I would like to test 20x of these in an industrial environment.

^ • Reply • Share >



DFRobot Support Mod → Hans Skaade • 2 years ago

Hey Hans,

You can either use third party software to manipulate the parameters or directly send AT commands yourself to edit your settings. For example, changing the baudrate is as simple as AT+BAUD=< Parameter> . To get a full understanding, please check out the datasheet for this product: [https://github.com/Arduino/...](https://github.com/Arduino/)

^ • Reply • Share >



Hans Skaade → DFRobot Support • 2 years ago

ability to change the frequency is key for us. The baudrate of course will be of assistance as well.

^ • Reply • Share >



DFRobot Support Mod → Hans Skaade • 2 years ago

Hey Hans,

You are able to change the frequency. You can check out the following Chinese link [http://www.dfrobot.com.cn/...](http://www.dfrobot.com.cn/) and scroll down to part 14, which is AT command part. Here is the translation: Let's take example, if you wanna use 433MHz, 433 000 000/61.035=7094290 Then convert 7094290 to hex, which becomes 6C4012. XX=6C YY=40 ZZ=12

Enter decimal number:

7094290

↻ Convert

✕ Reset

↔ Swap

Hex number:

6C4012

[see more](#)

^ • Reply • Share >



Joaquim Bravo Jordana • 2 years ago

Hello, I am sending AT commands to configure the device and im receiving a response that I don't understand. It is supposed that it has to send me ASCII characters?

Thank you

^ • Reply • Share >



Joaquim Bravo Jordana → Joaquim Bravo Jordana • 2 years ago

Im using 9600, parity none, 1 stopbit, databits 8

^ • Reply • Share >



DFRobot Support Mod → Joaquim Bravo Jordana • 2 years ago

What is the return information, it should be the same as the datasheet says.

^ • Reply • Share >



Tom Bombadil • 3 years ago • edited

Is there any working examples of those modules?

^ • Reply • Share >



DFRobot Support Mod → Tom Bombadil • 3 years ago

We don't have examples of this module, the datasheet gives information about how to use it.

^ • Reply • Share >



Tom Bombadil → DFRobot Support • 3 years ago

Is it possible to have this (<http://www.rf-module.cn/upd...>) translated in english?It seems full of important information that the datasheet linked above does not provide.

^ • Reply • Share >

DFRobot Support

Mod

Tom Bombadil • 2 years ago

Sorry, the manufacturer only provide this two datasheet, you can go to our forum if you have questions about this product.

• Reply

• Share

samgardner

• 3 years ago

The module advertises 888 MHZ, but in the text, the frequency is 433 MHZ. Please could you clarify?

• Reply

• Share

youshen

→ samgardner • 3 years ago

Hi, the operating frequency band is 868MHz.

• Reply

• Share

shin

• 3 years ago

datasheet is wrong. It's not working.
posted the details in <https://www.dfrobot.com/for...>

• Reply

• Share

DFRobot Support

Mod

→ shin • 3 years ago

When you get error feedback, please don't pay attention to that, you can keep the AT command setting.

• Reply

• Share

Subscribe

Add Disqus to your site

Do Not Sell My Data

DISQUS

Sign up for exclusive offers!

Your email address

→

Like us on

f

YouTube

in

DFROBOT®

DRIVE THE FUTURE

INFORMATION

About Us

Warranty

Privacy Policy

Shipping

Payment

FAQ

CUSTOMER SERVICE

DFRobot Distributors

Contact us

Site Map

MY ACCOUNT

Affiliates

Specials

Coupon

Downloaded from [Arrow.com](https://www.arrow.com)